Montana Fish, Wildlife & Parks

March 1, 1999

1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
Fisheries Division
Endangered Species Coordinator
Nongame Coordinator
Great Falls Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Lewis and Clark County Conservation District
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Mr. Fred Scherrer, Box 391, Augusta, MT 59410

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for a Future Fisheries Project tentatively planned to stabilize 2,300 feet of stream channel on three respective meander bends of Elk Creek (So. Fork of Sun River). This proposed project is located approximately 2 miles northeast of the town of Augusta in Lewis and Clark County.

Please submit any comments that you have by 5 P.M., April 1, 1999 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Completion of this project is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Elk Creek Channel Restoration and Bank Stabilization Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 which directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purposes of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. This project is being proposed to stabilize a total of 2,300 feet of stream channel on three respective meander bends of Elk Creek (South Fork of the Sun River). Elk Creek is a spawning and rearing tributary for brown trout and rainbow trout migrating from the main stem of the Sun River. The stream also maintains resident populations of these two species of trout. The project site, involving a single property owner, is located approximately 2 miles northeast of the town of Augusta in Lewis and Clark County.

I. Location of Project: This project will be conducted on Elk Creek (So. Fork of the Sun River) located approximately 2 miles northeast of the town of Augusta within Township 20 North, Range 6 West, Sections 2 and 10 in Lewis and Clark County.

II. Need for the Project: Department Goal C indicates that a Fisheries Division objective is to "provide and support programs to conserve and enhance high quality aquatic habitat and protect native aquatic species." The Future Fisheries Improvement Program is a tool to help achieve that objective.

Elk Creek has been degraded by past stream management practices, including overgrazing by livestock within the riparian corridor. This past activity has resulted in accelerated bank erosion along a number of meander bends, resulting in channel degradation and poor fish habitat. This project proposes to stabilize a total of 2,300 feet of stream channel on three meander bends by shaping cut banks; installing root wads and tree revetment; and planting willow along the margin of the channel. The project is intended to compliment two previous stabilization/restoration projects that have been successfully completed on adjacent reaches of stream.

III. Scope of the Project:

The proposal calls for stabilizing approximately 2,300 feet of stream channel on three respective meander bends of Elk Creek. The proposed work would involve adjusting the morphology of the channel by constructing proper channel curvature and channel dimensions; installing root wads and tree revetments on eroding banks; and planting willows along the channel margins. In addition, fencing will be installed to protect newly treated sites from livestock grazing. This project is expected to cost $16,500.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $5,000.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Stabilizing the existing channel is expected to create a more healthy habitat for aquatic life by reducing sediment input. Expected improvements in the aquatic habitat should enhance both resident trout populations in the stream and migrant populations from the main stem of the Sun River. Habitat for riparian dependent wildlife would also be improved by enhancing the riparian vegetative community through the planting of willow along the stream margin.

2. Water quantity, quality and distribution.

Short term increases in turbidity will occur during project construction. To minimize turbidity, construction will occur during a low flow period and operation of equipment in the stream channel will be minimized to the extent practicable. A permit for a short term exemption from turbidity will be obtained from the Water Quality Bureau and a 310 permit will be obtained from the local Conservation District. In the long term, stabilizing the existing channel would reduce the sediment contribution to downstream areas, thereby improving the overall quality of downstream waters.

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed by the installation of root wads, but would recover quickly following proposed re-vegetation efforts. Overall, the project is expected to reduce bank erosion and improve channel stability.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be improved by creating a more stable stream channel and by planting willow along the stream corridor.

5. Aesthetics.

Aesthetics would be enhanced by restoring an unstable reach of stream to a more healthy and natural stream environment. Approximately 2,300 feet of stream channel would be stabilized through proper channel re-alignment and the installation of root wads on eroding meander bends. The riparian vegetative community would be enhanced by planting willow along the margins of the channel.

9. Historic and archaeological sites

The proposed project will likely require an individual Army Corp of Engineers 404 permit. Therefore, the State Historic Preservation Office has been contacted to determine the need for compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

It is anticipated that the stabilization of 2,300 feet of Elk Creek would improve overall aquatic habitat and, as a result, would enhance trout populations residing in the stream. Migrant trout populations from the main stem of the Sun River also would be expected to be enhanced. Consequently, the recreational fishery in both Elk Creek and the Sun River would be expected to be improved. Fishing access is provided to the public by permission from the landowner.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this segment of Elk Creek will remain unstable. This ongoing instability will result in continued bank erosion, excessive sediment loading and the loss of fish habitat. In addition, habitat for riparian dependent wildlife will remain in a degraded condition. Recreational opportunities associated with fish and wildlife resources will remain reduced and aesthetics will continue to be impaired.

2. The Proposed Alternative

The proposed alternative is designed to stabilize the stream channel on three respective meander bends by shaping banks, installing root wads, and planting willow. These activities would reduce sediment loading, resulting in a more healthy habitat for aquatic life. Planting willow along the stream margin would create more diverse habitat for riparian dependent wildlife. This alternative would improve fish and wildlife habitat, aesthetics and water quality within the project area and would be expected to increase trout populations in both Elk Creek and the main stem of the Sun River.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be published on the Montana Electronic Bulletin Board.

3. Duration of comment period?

Public comment will be accepted through 5 P.M. on April 1, 1999.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue
Helena, MT 59620

Telephone: (406) 444-2432

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701
(406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title Elk Creek Channel Restoration and Bank Stabilization Project

Division/Bureau Fisheries Division -Future Fisheries Improvement

Description of Project The project is being proposed to stabilize a total of 2,300 feet of stream channel on three eroding meander bends of Elk Creek (So. Fork of Sun River). Elk Creek is a spawning and rearing tributary for brown trout and rainbow trout migrating from the mainstem of the Sun River. The stream also maintains resident populations of these two species of trout. Stabilization would involve adjusting the morphology of the channel to create proper channel curvature and dimension; installing root wads on eroding meander bends; and planting willow along the channel margin. The project site, involving a single landowner, is located approximately 2 miles northeast of the town of Augusta in Lewis and Clark County.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats		X				X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality		X				X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources				X		
8. Demands on environmental resources of land, water, air & energy				X		

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
9. Historical & archaeological sites				X		X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction Lewis and Clark County Conservation District, NRCS, US Fish and Wildlife Service, US Army Corp of Engineers

Individuals or groups contributing to this EA Sue McNeal, U.S. Fish and Wildlife Service

Recommendation concerning preparation of EIS No EIS required.

EA prepared by : Mark Lere

Date: March 1, 1999